



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,311	06/19/2001	Steven B. Adler	AUS920010589US1	6894

50170 7590 12/15/2005

IBM CORP. (WIP)  
c/o WALDER INTELLECTUAL PROPERTY LAW, P.C.  
P.O. BOX 832745  
RICHARDSON, TX 75083

EXAMINER
----------

HO, THOMAS M

ART UNIT	PAPER NUMBER
----------	--------------

2134

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/884,311		ADLER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Thomas M. Ho		2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-20 are pending.

***Response to Arguments***

2. In view of the **Notice of Appeal** filed on **8/29/05**, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection and rebuttal to the reply brief is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under **37 CFR 1.111** (if this Office action is non-final) or a reply under **37 CFR 1.113** (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits ( **37 CFR 1.130**, **1.131** or **1.132**) or other evidence are permitted. See **37 CFR 1.193(b)(2)**.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “active entity” in claim 1 is used by the claim to mean “human being or legal entity”, while the accepted meaning is “an object that performs an action” The term is indefinite because the specification does not clearly redefine the term.

Applicants have argued the following (page 7, last paragraph)

*Appellents respectfully submit that the Examiner must interpret the claims in light of the specification and that the specification is a dictionary for the terms to be used in the claims. Claim 1 uses the term “active entity” and thus, it is the Examiner’s duty when interpreting the claim to look to the specification to determine what the term “active entity”*

*encompasses. According to the present specification, an active entity is a human being or legal entity (see page 15, lines 13-15). The specification does not state that an active "entity" is just any object. To the contrary, the specification clearly states that an active entity is human being or legal entity.*

The Examiner counters that the Examiner must interpret the claims with the "broadest reasonable interpretation consistent with the specification." (MPEP 2111) and not just simply "in light of the specification". Applicant argues against the Examiner's definition of an active entity and cites (page 15, lines 13-15) as clearly stating that an active entity is a human being or legal entity. However, contrary to Applicant's allegations, this reference only provides an example of what an active entity **may** be. It provides no explicit definition and certainly does not preclude the interpretation that an active entity may be an instantiated object as the Examiner has defined it.

The **exact** citation of page 15, lines 13-15, which applicant has cited in support of his position recites

*"...facto standard in Business object modeling. In particular, FIG 6. shows classes representing active entities like human beings or legal entities. Inheritance relationships are shown by lines that..."*

The Examiner contends this definition is not explicit, and the Examiner cannot read these limitations into the claimed language. It is clear from the language the Applicant did not intend for the term "active entities" to be explicitly limited to human beings or legal entities. The

language is exemplary, and not an explicit definition. Applicant is appearing to force the Examiner to adopt the definition that an active entity may only be a human being or legal entity to satisfy the claimed language, while this restricted scope is clearly is not so confining to the Applicant as worded by the specification.

Furthermore, the Applicant has had the opportunity to amend the term “active entities” into “human beings or legal entity” but chose not to. If the Applicant’s interpretation of the term was limited only to “human beings or legal entities”, Applicant may have amended the term as such without further loss of generality to the claims. Instead the Applicant has chosen to recite the broader term “active entities”, and without explicit re-definition by the specification, the Examiner has interpreted the term as one of ordinary skill in the art of object oriented programming design would have. If Applicant desires that the term active entity is to be interpreted as a “human being” or “legal entity”, an explicit redefinition must be given by the specification, and not merely the providing a several examples of what an active entity is “like”.

Furthermore, Applicant’s claim 5 recites

*The method of claim 4, wherein said providing output further comprises identifying at least one way in which said information-handling process could be improved.*

Applicant has argued on paragraph 2, page 14.

*“Using CRC cards, which again are physical index cards that a programmer may use as a tool to understand how objects work with each other, does not provide any output that identifies at least one way in which an information handling process can be improved.”*

As the applicant has gathered, the use of CRC cards is to assist the programmers in gaining a better understanding of how the objects of their design work with one another.

The Examiner contends that the Applicant has merely claimed a “potential”.

The claim does not recite “at least one way in which said information-handling process *can* definitively be improved” but recite “at least one way in which said information-handling process *could be* improved”

One of ordinary skill in the art would understand that a better understanding of the objects in question which applicant has conceded is a tool in which a programmer may use as a tool to understand how objects work with each other is in fact a way in which the information handling process *could be improved*.

Nevertheless, claim 5 is indefinite because it fails to identify the specific steps in which an information process could be improved. Left to itself, it would appear that any set of actions may be construed as having the potential to improve the information handling process, or rather is a method in which such a process “could” be improved.

***Further response to Arguments***

Applicant has additionally argued:

*The basic fallacy in the Examiner's position is that the Examiner is using a general textbook teaching of basic building blocks of object oriented environments and concluding that these general teachings necessarily obviate all possible uses and arrangements of these building blocks.*

The Examiner contends that this is not his position. It is the Examiner's position that insofar as the Applicant has recited a "structure" or particular "arrangement" of the building blocks, that this particular arrangement is met by Martin. The Applicant has recited a "structure" or "arrangement" of these blocks in broad terms.

Claim 1 recites as follows:

*A method in a data processing system, for handling personally identifiable information, said method comprising:*

*Providing in a computer, a first set of object classes representing active entities in an information-handling process, wherein a limited number of privacy-related actions represent operations performed on data.*

*Providing in said computer, a second set of object classes representing data and rules in said information-handling process, wherein at least one object class has said rules associated with said data, and wherein said data represents said personally identifiable information;*

*Processing transactions, in the data processing system, involving said personally identifiable information, using said computer and said first and second set of object classes, so as to enforce a privacy policy, associated with the personally identifiable information and defined by said rules, against one or more active entities represented by said first set of object classes.*

The Examiner contends however that as far as claim 1 is specific about the arrangement of particular objects, classes, and rules, Martin recites these limitations.

The Examiner contends that claim 1 provides no substantial “arrangement” or “structure” or “manipulation” that would not have been obvious to one of ordinary skill in the art in view of Martin.

For example, Applicant’s claim 1 recites: “providing” “in a computer” a first set of object classes. It is evident that the whole purpose of Martin is to provide insight in how these object classes may be created for their eventual implementation on the computer.

Martin discloses a first set of object classes of object classes on (pages 23-24, “What is a class”) In this sense, Martin can be construed to be “providing” these elements.

It is not the Examiner’s position that a general teaching of the building blocks of object oriented environments obviates all possible uses and arrangements of these building blocks. It is however, the Examiner’s position that Martin discloses the “arrangement” of these building blocks as far as the Applicant has defined it in claim 1.

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin, "Principles of Object Oriented Analysis and Design" (hereafter Martin).

In reference to claim 1:

(Martin, "Principles of Object Oriented Analysis and Design") discloses a method for handling personally identifiable information, said method comprising:

- Providing in a computer a first set of object classes, where object classes are classes that are later to be instantiated into objects. (pages 23-24, "What is a Class?")
- Representing active entities in an information-handling process, wherein a limited number of privacy-related actions represent operations performed on data, where the active entities are the objects themselves, and the privacy related actions-representing operations performed on data are the operations used to read and manipulate data of the object. (page 19, "operations")
- Providing in said computer a second set of object classes representing data and rules in said information-handling process, wherein at least one object class has said rules

associated with said data, and wherein said data represents said personally identifiable information, where objects are capable of representing data and rules in their interrelationships with other objects. (page 144, "Object Structure Analysis/ Object Behavior Analysis")

- Processing transactions, in the data processing system, involving said personally identifiable information, using said computer and said first and second set of object classes, associated with personally identifiable information and defined by said rules, against one or more active entities represented by said first set of object classes, where transactions are performed in the interactions of the objects between one another, and the examples of personally identifiable information are who the customers are, their salaries, and the employee type. (page 146-147, Diagrams).

Martin fails to explicitly disclose a method wherein the first and second set of object classes enforce a policy.

Birnbaum(Abstract) discloses "Policies are defined to be rules for the values of the attributes of managed objects." (Column 2, lines 14-26) & (Column 2, lines 40-45)

Birnbaum (Column 5, lines 25-40) discloses that the policies used for objects and classes may comprises classes which represent people or employees within an organization.

Birnbaum has described policies to the set of rules governing objects and their attributes.

Birnbaum additionally teaches that in particular a "privacy policy" or policies to which rules

Art Unit: 2134

governing the security, and access of resources for objects may be given, are advantageous in that they help insure the security of accountability of a resource and the context in which they may be used. (Column 6, lines 33-49)

It would have been obvious to one of ordinary skill in the art to have the set of object classes for Martin enforce a privacy policy in order to secure the accountability of the object resources.

In reference to claim 2:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 1, wherein said object classes include one or more object classes representing parties, selected from the group consisting of

- A data user object class, where the student is the data user object class. (Page 158)
- A data subject object class, where the subject object class is the class. (page 158)
- A guardian object class, where the guardian object class is a stock withdrawal subsystem.  
(page 194)
- A privacy authority object class, where the privacy authority class is a server class. (page 192)

In reference to claim 3:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 1, wherein said at least one object class, having said rules associated with said data. (page 144, "Object Structure Analysis/ Object Behavior Analysis")

(Martin, "Principles of Object Oriented Analysis and Design") fails to explicitly disclose representing the rules as a filled paper form, including both collected data and rules regarding said collected data.

(Martin, "Principles of Object Oriented Analysis and Design") does however disclose that rules may be written in the English Language. (page 133-134, "Rules Expressed in English"). Martin discloses more rules on pages (138-139, Box 10.1 & 10.2)

The Examiner takes official notice that representing the rules as a filled paper form, including both collected data and rules regarding said collected data was well known in the art at the time of invention. An example of this is a contract signed by certain parties.

It would have been obvious to one of ordinary skill in the art at the time of invention to collect rules as a filled paper form.

In reference to claim 4:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method, in a data processing system, for improving the handling of personally identifiable information, said method comprising:

- Performing, in the data processing system, an initial assessment of an information handling process, where the initial assessment is the analysis of the system to be modeled in an Object oriented process. (pages 59-60, "Models of Reality")
- Constructing, in said data processing system, a model of said information handling process, based on said initial assessment, where the model of said information handling process is performed once an analysis has been made. (pages 59-60, "Models of Reality")
- Providing output, from said data processing system, based on said initial assessment and constructing, that identifies at least one way in which said personally identifiable information could be better handled, where a particular technique in the refinement of the object model is the practice of using CRC cards to gain a better understanding about how to handle the model at hand. (Pages 187-190, "Responsibility driven design")
- Wherein said constructing includes:
- Representing entities, data, and rules in said information handling process by using a limited number of object classes, where objects represent entities, where the data are attributes of objects, and where rules are functions that typify the interaction between objects. (page 156, "models and diagrams") & (page 140, center diagram, 146-147, Diagrams) & (page 166)

- Representing operations performed on data by using a limited number of privacy-related actions, where the active entities are the objects themselves, and the privacy related actions-representing operations performed on data are the operations used to read and manipulate data of the object. (page 19, “operations”)
- Representing transactions by using said limited number of object classes and said limited number of privacy-related actions, where the transactions are interactions between the modeled objects, (Page 118, “Events triggers and Operations”) and the request for data is a privacy related action. (page 19, “operations”)

The Examiner notes that Applicant has defined what privacy related actions are in the specification. On page 19 of the specification, Applicant defines some privacy related actions including “access” to grant access to read the user’s information. For this reason, the Examiner has defined similar operations in Martin as “privacy related actions”

In reference to claim 5:

(Martin, “Principles of Object Oriented Analysis and Design”) discloses the method of claim wherein said providing output further comprises identifying at least one way in which said information-handling process could be improved, where a particular technique in the refinement of the object model is the practice of using CRC cards to gain a better understanding about how to handle the model at hand. (Pages 187-190, “Responsibility driven design”)

In reference to claim 6:

Art Unit: 2134

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 4, wherein said providing output further comprises identifying at least one way to improve compliance with a law or contract, where the CRC method is a technique for better identifying responsibilities of the objects (page 188, "responsibilities and collaborators"), and it is known in the art that groups responsibilities are contracts. (page 191, "contracts")

Claims 7, 9 are rejected for the same reasons as claim 5.

In reference to claim 8:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 4, further comprising designing a modification to said information-handling process, based on said constructing and providing, where modifications are constantly being designed in the creation of the object oriented model of the system from the creation of the model, to the creation of its design, to the generation of the code. (page 60)

Claim 10, 13, 16 are rejected for the same reasons as claim 2.

Claims 12, 15 are rejected for the same reasons as claim 1.

Claims 11, 14, 17 are rejected for the same reasons as claim 3.

In reference to claim 18:

(Martin, "Principles of Object Oriented Analysis and Design") (page 166) discloses the method of claim 1, wherein:

A first active entity represented by a first object class in said first set of object classes is a first data user that requests said personally identifiable information from a data subject, where a first active entity is a student, represented by a person object (Figure 11.13 description) that requests personally identifiable information from a data subject, where the personally identifiable information is a registration.

In reference to claim 19:

(Martin, "Principles of Object Oriented Analysis and Design") (page 166) discloses the method claim 18, further comprising: transforming, based on said rules, said personally identifiable information into a depersonalized format prior to providing said personally identifiable information to the second data user, where the registration information is in a depersonalized format, but is specific to a particular student when a student makes that registration.

*Claim 20 is substantially similar to claim 12 and is rejected for the same reasons.*

### ***Conclusion***

4. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (703)305-8029. The examiner can normally be reached on M-F from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,


Art Unit: 2134

Gregory A. Morse can be reached on (703)308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5484.

TMH

December 12<sup>th</sup>, 2005

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 4100